

(12) United States Patent

Bower et al.

(54) PUMPABLE MINE VENTILATION **STRUCTURE**

- (71) Applicants: Heintzmann Corporation, Cedar Bluff, VA (US); ABC Industries, Inc., Warsaw, IN (US)
- (72) Inventors: Joseph P. Bower, Morgantown, WV (US); John J. Breedlove, Cedar Bluff, VA (US); Erik Denver, Keen Mountain, VA (US); Steven S. Fleagle,

Syracuse, IN (US); Tyler Proffitt, Pounding Mill, VA (US)

- (73) Assignees: FCI Holdings Delaware, Inc., Wilmington, DE (US); ABC Industries, Inc., Winona Lake, IN (US)
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This patent is subject to a terminal disclaimer.

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- (58) Field of Classification Search USPC 405/132, 151, 288, 289; 299/11, 12; 454/168, 169, 170 See application file for complete search history.

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Primary Examiner — Sean D Andrish (74) Attorney, Agent, or Firm — The Webb Law Firm

(57) **ABSTRACT**

A pumpable mine ventilation stopping wall structure comprised of a pumpable bag having spaced walls of generally parallel nonporous and flexible sheets with the sheets retained in spaced relationship with spaced flexible cross ties. The perimeter of the spaced walls may be closed off with a permeable mesh having a mesh size which will permit restricted flow of cementitious grout therethrough for sealing the wall structure to surrounding rough mine faces. The bag is provided with at least one grout fill port for filling the bag by pumping cementitious grout into the bag.

2 Claims, 7 Drawing Sheets

